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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	APR	02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
NEWS	3	APR	02	PATDPAFULL: Application and priority number formats enhanced
NEWS	4	APR	02	DWPI: New display format ALLSTR available
NEWS	5	APR	02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS	6	APR	02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
NEWS	7	APR	07	CA/CAplus CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields
NEWS	8	APR	07	50,000 World Traditional Medicine (WTM) Patents Now Available in CAplus
NEWS	9	APR	07	MEDLINE Coverage Is Extended Back to 1947
NEWS	10	JUN		WPI First View (File WPIFV) will no longer be available after July 30, 2010
NEWS	11	JUN	18	DWPI: New coverage - French Granted Patents
NEWS	12	JUN	18	CAS and FIZ Karlsruhe announce plans for a new STN platform
NEWS	13	JUN	18	IPC codes have been added to the INSPEC backfile (1969-2009)
NEWS	14	JUN	21	Removal of Pre-IPC 8 data fields streamline displays in CA/CAplus, CASREACT, and MARPAT
NEWS	15	JUN	21	Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers EMBASE Classic on STN
NEWS	16	JUN	28	Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol
NEWS	17	JUN	29	Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN
NEWS	18	JUL	19	Enhancement of citation information in INPADOC databases provides new, more efficient competitor analyses
NEWS	19	JUL	26	CAS coverage of global patent authorities has expanded to 61 with the addition of Costa Rica
NEWS	20	SEP	09	New basic patent number increases precision in retrieving records from USGENE

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 07 JULY 2010.

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=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
0.22 0.22

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5 DICTIONARY FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

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http://www.cas.org/support/stngen/stndoc/properties.html

=> e 2,3-dichloropyridine/cn E1 2.3-DICHL

E1 1 2,3-DICHLOROPYRAZINE-5-CARBOXYLIC ACID/CN E2 1 2,3-DICHLOROPYRIDIN-4-OL/CN

E3 1 --> 2,3-DICHLOROPYRIDINE/CN

E4 1 2,3-DICHLOROPYRIDINE 1-OXIDE/CN

E5 1 2,3-DICHLOROPYRIDINE CONJUGATE ACID/CN

```
1 2,3-DICHLOROPYRIDINE-5-CARBOXALDEHYDE/CN
Ε6
E7
                  2,3-DICHLOROPYRIDINE-5-CARBOXYLIC ACID/CN
            1
E.8
                  2,3-DICHLOROPYRIDO(2,3-B)PYRAZINE/CN
            1
                 2,3-DICHLOROPYRIDO(3,2-B)PYRAZINE/CN
E9
            1
E10
           1
                 2,3-DICHLOROPYRIDO(3,4-B)PYRAZINE/CN
E11
            1
                 2,3-DICHLOROQUINOLINE/CN
E12
            1
                 2,3-DICHLOROQUINOXALINE/CN
=> s e3
            1 "2,3-DICHLOROPYRIDINE"/CN
=> d 11
THE ESTIMATED COST FOR THIS REQUEST IS 2.10 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
T.1
RN
     2402-77-9 REGISTRY
ΕD
    Entered STN: 16 Nov 1984
CN
    Pyridine, 2,3-dichloro- (CA INDEX NAME)
OTHER NAMES:
CN
     2,3-Dichloropyridine
    NSC 298535
CN
MF
    C5 H3 C12 N
CI
    COM
LC
                 ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
     STN Files:
       CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, IFICDB, IFIPAT, IFIUDB,
       RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
                    EINECS**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

342 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
344 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplus
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
8.09
8.31

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FILE COVERS 1907 - 10 Sep 2010 VOL 153 ISS 12 FILE LAST UPDATED: 9 Sep 2010 (20100909/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 E 2,3-DICHLOROPYRIDINE/CN

L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 L2 28 S L1/PREP

=> file reg

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
2.91
11.22

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STRUCTURE FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5 DICTIONARY FILE UPDATES: 9 SEP 2010 HIGHEST RN 1240463-09-5 New CAS Information Use Policies, enter HELP USAGETERMS for details.
```

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http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e 3-amino-2-chloropyridine/cn
                                            3-AMINO-2-CHLOROPROPIONITRILE/CN
                                   1
Ε2
                                   1
                                                   3-AMINO-2-CHLOROPROPIONITRILE HYDROCHLORIDE/CN
E3
                                   1 --> 3-AMINO-2-CHLOROPYRIDINE/CN
                                                  3-AMINO-2-CHLOROPYRIDINE-4-METHANOL/CN
E4
E5
                                  1
                                                  3-AMINO-2-CHLOROOUINOXALINE/CN
E6
                                  1
                                                  3-AMINO-2-CYANO-(5) FERROCENOPHAN-2-ENE/CN
E.7
                                 1
                                                  3-AMINO-2-CYANO-2-HEXENENITRILE/CN
                                                 3-AMINO-2-CYANO-2-PENTENENITRILE/CN
Ε8
                                1
                              1 3-AMINO-2-CIANO-2-PENIENENIIRILE/CN
1 3-AMINO-2-CYANO-3-(METHYL) THIOACRYLAMIDE/CN
1 3-AMINO-2-CYANO-3-(METHYLTHIO) ACRYLONITRILE/CN
1 3-AMINO-2-CYANO-3-(PHENYL) THIOACRYLAMIDE/CN
1 3-AMINO-2-CYANO-4 4-DIMETHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHYL-2-PENTENITRILE/(METHY
E.9
E10
E11
                                                3-AMINO-2-CYANO-4, 4-DIMETHYL-2-PENTENENITRILE/CN
E12
                                 1
=> s e3
L3
                                   1 3-AMINO-2-CHLOROPYRIDINE/CN
=> d 13
THE ESTIMATED COST FOR THIS REQUEST IS 2.10 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:v
L3
            ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
RN
             6298-19-7 REGISTRY
ED
             Entered STN: 16 Nov 1984
             3-Pyridinamine, 2-chloro- (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
            Pyridine, 3-amino-2-chloro- (6CI, 7CI, 8CI)
CN
OTHER NAMES:
             2-Chloro-3-aminopyridine
CN
             2-Chloro-3-pyridinamine
CN
CN
             2-Chloro-3-pyridineamine
CN
             2-Chloro-3-pyridylamine
CN
             2-Chloropyridin-3-ylamine
             3-Amino-2-chloropyridine
CN
CN
             NSC 45407
MF
             C5 H5 C1 N2
CI
LC
             STN Files:
                                                ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
```

CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN*, IFICDB, IFIPAT, IFIUDB, PS, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD (*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

544 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
547 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
8.09 19.31

FULL ESTIMATED COST

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FILE COVERS 1907 - 10 Sep 2010 VOL 153 ISS 12
FILE LAST UPDATED: 9 Sep 2010 (20100909/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate

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substance identification.
=> d his
     (FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)
     FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010
                E 2,3-DICHLOROPYRIDINE/CN
L1
              1 S E3
     FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010
L2
             28 S L1/PREP
     FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010
                E 3-AMINO-2-CHLOROPYRIDINE/CN
              1 S E3
T.3
     FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010
=> s 13/rct
           547 L3
       3485572 RCT/RL
L4
           487 L3/RCT
                 (L3 (L) RCT/RL)
=> s 14 and 12
L_5
             5 L4 AND L2
=> s 15 and sandmeyer
          1828 SANDMEYER
             3 SANDMEYERS
          1829 SANDMEYER
                 (SANDMEYER OR SANDMEYERS)
             1 L5 AND SANDMEYER
1.6
=> d 16, ibib abs hitstr, 1
THE ESTIMATED COST FOR THIS REQUEST IS 5.81 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:v
    ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                         2009:990904 HCAPLUS
DOCUMENT NUMBER:
                         153:289598
TITLE:
                         One-pot synthesis of 2,3-dichloropyridine
                         Feng, Cun; Li, Hui; Mao, Chunhui; Yang, Bin; Chen,
AUTHOR(S):
                         Department of Chemistry, Central China Normal
CORPORATE SOURCE:
                         University, Wuhan, Hubei Province, 430079, Peop. Rep.
                         China
SOURCE:
                         Jingxi Huagong Zhongjianti (2008), 38(5), 19-21, 45
                         CODEN: JHZIAR; ISSN: 1009-9212
                         Jingxi Huagong Zhongjianti Zazhishe
PUBLISHER:
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         Chinese
     2,3-Dichloropyridine is a key intermediate of a new insecticide
     chlorantraniliprole. Several synthesis routes of 2,3-dichloropyridine
    were evaluated in this paper, and therefore an economic and reasonable
```

one-pot synthesis of 2,3-dichloropyridine was explored through chlorination, diazotization and sandmeyer reaction starting with 3-aminopyridine. The yield and purity of the product was 66.9% and 98% resp. In addns. of the mechanisms of reactions were studied and the byproducts were separated and characterized.

IT 2402-77-9P, 2,3-Dichloropyridine RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)

(one-pot synthesis of 2,3-dichloropyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

RN 6298-19-7 HCAPLUS

CN 3-Pyridinamine, 2-chloro- (CA INDEX NAME)

=> d his

(FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 E 2,3-DICHLOROPYRIDINE/CN

L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 L2 28 S L1/PREP

FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010 E 3-AMINO-2-CHLOROPYRIDINE/CN

L3 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010

L4 487 S L3/RCT

L5 5 S L4 AND L2

L6 1 S L5 AND SANDMEYER

```
=> s 12 not 16
L7 27 L2 NOT L6
=> s 17 and copper
      1120963 COPPER
          544 COPPERS
      1121038 COPPER
               (COPPER OR COPPERS)
L8
            3 L7 AND COPPER
\Rightarrow d 18, ibib abs hitstr, 1-3
THE ESTIMATED COST FOR THIS REQUEST IS 17.43 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y
    ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:1138787 HCAPLUS
DOCUMENT NUMBER:
                       151:361554
TITLE:
                       Preparation of 2,3-dichloropyridine from
                       3-amino-2-chloropyridine
                       Shapiro, Rafael
INVENTOR(S):
                    E. I. Du Pont De Nemours and Company, USA
PATENT ASSIGNEE(S):
SOURCE:
                       PCT Int. Appl., 19pp.
                       CODEN: PIXXD2
DOCUMENT TYPE:
                       Patent
LANGUAGE:
                       English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                  KIND DATE APPLICATION NO. DATE
    PATENT NO.
                      WO 2009114589
                       A1 20090917 WO 2009-US36747
                                                              20090311
        W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
            FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
            ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
            PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
            IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
            ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                       A1 20100512
                                         AR 2009-100912
    AR 70895
                                                                20090313
                                          US 2008-36174P P 20080313
PRIORITY APPLN. INFO.:
                      CASREACT 151:361554
OTHER SOURCE(S):
    The invention relates to a method for preparing 2,3-dichloropyridine,
AΒ
    comprising the steps of, (a) contacting 3-amino-2-chloropyridine or a
    solution comprising 3-amino-2-chloropyridine with hydrochloric acid to form a
    3-amino-2-chloropyridine hydrochloric acid salt; (b) contacting the
    3-amino-2-chloropyridine hydrochloric acid salt with a nitrite salt to
    form a corresponding diazonium chloride salt; and (c) contacting the
    corresponding diazonium chloride salt with hydrochloric acid in the
    presence of sulfamic acid and a copper catalyst wherein at least
    about 50 % of the copper is the copper(II) oxidation
```

state, optionally in the presence of an organic solvent, to form $2,3-\mbox{dichloropyridine}$.

IT 2402-77-9P, 2,3-Dichloropyridine

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of dichloropyridine from aminochloropyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1369724 HCAPLUS

DOCUMENT NUMBER: 150:19997

TITLE: Method for preparing 2,3-dichloropyridine

INVENTOR(S):
Liu, Xiaomin

PATENT ASSIGNEE(S): Hebei Yanuo Chemical Industry Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101302190 PRIORITY APPLN. INFO.:	A	20081112	CN 2008-10055291 CN 2008-10055291	20080630 20080630

OTHER SOURCE(S): CASREACT 150:19997

The title method comprises the steps of: dissolving 3-aminopyridine into concentrated HCl acid to obtain a HCl acid solution of 3-aminopyridine hydrochloride, performing chlorination onto 3-aminopyridine with chlorinating agents with Fe2+ or Fe3+ as catalyst to obtain a system containing mainly 2-chloro-3-aminopyridine, performing diazotization/chlorination with sodium nitrite with Cu+ and/or Cu2+ as catalyst to obtain 2,3-dichloropyridine, adjusting the pH to above 7, distilling with water vapor to obtain crude 2,3-dichloropyridine, and recrystg. to obtain refined 2,3-dichloropyridine. The method has high product purity (above 99.2%), and high yield (above 71.4% calculated by 3-aminopyridine).

IT 2402-77-9P, 2,3-Dichloropyridine

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of 2,3-dichloropyridine from 3-aminopyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

L8 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:696875 HCAPLUS

DOCUMENT NUMBER: 143:155307

TITLE: Process for the manufacture of 2,3-dichloropyridine

INVENTOR(S): Shapiro, Rafael

PATENT ASSIGNEE(S): E.I. Dupont de Nemours and Company, USA

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

						KIND DATE			APPLICATION NO.					DATE				
	WO 2005070888						0804	WO 2005-US2462					20050121					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
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			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US	, UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
			AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS	, IT,	LT,	LU,	MC,	NL,	PL,	PT,
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	BR 2005006502				A 20070227			BR 2005-6502										
	JP 2007523065																	
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		2007						2007				2006-						
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 143:155307

AB A method for preparing 2,3-dichloropyridine is disclosed in which

OS.CITING REF COUNT:

1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 20:41:33 ON 10 SEP 2010)

FILE 'REGISTRY' ENTERED AT 20:41:44 ON 10 SEP 2010 E 2,3-DICHLOROPYRIDINE/CN

L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:06 ON 10 SEP 2010 L2 28 S L1/PREP

FILE 'REGISTRY' ENTERED AT 20:42:15 ON 10 SEP 2010 E 3-AMINO-2-CHLOROPYRIDINE/CN

L3 1 S E3

FILE 'HCAPLUS' ENTERED AT 20:42:33 ON 10 SEP 2010

L4 487 S L3/RCT L5 5 S L4 AND L2

L6 1 S L5 AND SANDMEYER

L7 27 S L2 NOT L6

L8 3 S L7 AND COPPER

=> s 17 not 18

L9 24 L7 NOT L8

=> s 19 and nitrite

75074 NITRITE 31178 NITRITES 94509 NITRITE

(NITRITE OR NITRITES)

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THE ESTIMATED COST FOR THIS REQUEST IS 11.62 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y

L10 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2010:786112 HCAPLUS

DOCUMENT NUMBER: 153:116067

TITLE: Process for preparation of dihalopyridines via

halogenation of 3-aminopyridine

INVENTOR(S): Modi, Gelebith H.; Tyagi, Anil Kumar; Agarwal,

Ashutosh; Chandra, Hem; Bhardwaj, Nikhilesh Chandra;

Verma, Pradeep Kumar

PATENT ASSIGNEE(S): Jubilant Organosys Ltd., India SOURCE: U.S. Pat. Appl. Publ., 6pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE		
				-			
US 20100160641	A1	20100624	US 2009-641926		20091218		
IN 2008DE02891	A	20100702	IN 2008-DE2891		20081219		
CN 101774966	A	20100714	CN 2009-10258500		20091221		
PRIORITY APPLN. INFO.:			IN 2008-DE2891	Α	20081219		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 153:116067; MARPAT 153:116067

GΙ

AB The title compds. (I; X = halo) were prepared by halogenation of 3-aminopyridine in the presence of FeCl3 to give crude 3-amino-2-halopyridine, diazotization, reaction with haloacid, separation of undesired products by treatment with water-immiscible solvents, dilution of the resulting mass with water, and extraction with water-immiscible organic solvents. Thus, 3-aminopyridine in H2O was treated with HCl, FeCl3, and Cl2 to give 75% 3-amino-2-chloropyridine containing 2-3% 3-amino-2,6-dichloropyridine. The latter in aqueous HCl at -8° to -3° was treated with aqueous NaNO2 over 2-3 h and the resulting solution

-3° was treated with aqueous NaNO2 over 2-3 h and the resulting solution was added to a solution of aqueous HCl and CuCl at 60-70° to give 75% 2,3-dichloropyridine.

IT 2402-77-9P, 2,3-Dichloropyridine

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of dihalopyridines via halogenation of aminopyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)



L10 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:743344 HCAPLUS

DOCUMENT NUMBER: 145:188734

TITLE: Preparation method for 2,3-dichloropyridine from

3-aminopyridine

INVENTOR(S): Zhao, Taolin; Liu, Aiguo

PATENT ASSIGNEE(S): Nanjing Guangtong Pharmaceutical and Chemical Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
CN 1807414	A	20060726	CN 2006-10038159	20060206		
CN 100357272	С	20071226				
PRIORITY APPLN. INFO.:			CN 2006-10038159	20060206		

OTHER SOURCE(S): CASREACT 145:188734

AB The title preparation method includes 2-chlorination of 3-aminopyridine with hydrogen peroxide (content <20%) at a molar ratio of 1:1 in concentrated hydrochloric acid (content ≤31%) at 6-8 °C for 1-2 h; diazotizing with 30% sodium nitrite solution (at equal mole to the 3-aminopyridine) at <0 °C for 0.5-1 h; 3-chlorination with mixture of cuprous chloride (0.15 M times of 3-aminopyridine) and concentrated hydrochloric

acid (2 M times of 3-aminopyridine) at <0 $^{\circ}$ C for >30 min; extracting with dichloromethane at room temperature; and vacuum distilling solvent out to obtain 2,3-dichloropyridine.

IT 2402-77-9P, 2,3-Dichloropyridine

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of dichloropyridine from aminopyridine)

RN 2402-77-9 HCAPLUS

CN Pyridine, 2,3-dichloro- (CA INDEX NAME)

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